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ORIGINAL RESEARCH: EMPIRICAL RESEARCH –
QUANTITATIVE

Staff's person-centredness in dementia care in relation to job characteristics and job-related well-being: a cross-sectional survey in nursing homes

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NetherlandsWILLEMSE B.M., DE JONGE J., SMIT D., VISSER Q., DEPLA M.F.I.A. & POT A.M. (2014) Staff's person-centredness in dementia care in relation to job characteristics and job-related well-being: a cross-sectional survey in nursing homes. *Journal of Advanced Nursing* 00(0), 000–000. doi: 10.1111/jan.12505**Abstract****Aim.** To explore the role of nursing staff's person-centredness caring for people with dementia in relation to their work environment and job-related well-being.**Background.** Given the development towards person-centred care and labour force issues, research has recently focused on the effect of person-centredness on nursing staff's well-being. Findings from occupational stress research suggest that employees' personal characteristics, such as person-centredness, can moderate the impact particular job characteristics have on their job-related well-being.**Design.** Cross-sectional survey.**Methods.** A national survey was conducted among healthcare staff ($n = 1147$) in 136 living arrangements for people with dementia in the Netherlands (2008–2009). Hierarchical regression analyses were used.**Results.** Person-centredness moderates the relationship between coworker support and three outcomes of job-related well-being and between supervisor support and two of these outcomes. For highly person-centred nursing staff, coworker support was found to have a weaker impact and supervisor support to have a stronger impact on their job-related well-being. In addition, direct effects showed that person-centredness was weakly associated with more job satisfaction, more emotional exhaustion and more strongly with more personal accomplishment.**Conclusion.** Nursing staff's person-centredness does play a modest role in relation to job characteristics and job-related well-being. Findings indicate that person-centredness is not only beneficial to residents with dementia as found earlier, but also for nursing staff themselves; specifically, in case nursing staff members feel supported by their supervisor. Since a more person-centred workforce feels more competent, further implementation of person-centred care might have a positive impact on the attractiveness of the profession.*continued on page 2*

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Keywords: burnout, coworker support, decision-authority, dementia, healthcare staff, job demands, job satisfaction, nursing, person-centred care, supervisor support

Introduction

Recently, the focus in dementia care is increasingly directed towards person-centred care. Person-centred care acknowledges that the person and their psychological needs should be the focus of care delivery and not the disease (Edvardsson & Innes 2010). It is regarded as an approach which delivers high-quality care (Edvardsson *et al.* 2008) offering benefits including improved quality of life for people with dementia (Sloane *et al.* 2004). As the relationships between nursing staff and people with dementia are central to person-centred care, staff's attitudes and work methods are crucial (Kitwood 1997, Stewart *et al.* 2000). A person-centred attitude refers to recognizing people with dementia as unique individuals with the same value and needs as any other person (Lintern *et al.* 2000).

The number of people with dementia is increasing worldwide (Ferri *et al.* 2005, Wimo & Prince 2010) while the labour force is decreasing (Central Planning Office of the Netherlands 2009). Self-evidently, this will have a major impact on the number of people in need of residential or nursing-home care and the potential staff available to provide care to people with dementia (Health council of the Netherlands 2002). If we want to safeguard high-quality, person-centred dementia care, insight is needed in ways to create a satisfied and sustainable workforce. This is a real challenge as annual turnover rates in nursing homes have been reported to be high (Cohen-Mansfield 1997) and nursing staff in general are prone to become burnout as a response to emotional stress of constant interaction with clients (de Jonge *et al.* 2008).

A recent focus of research in dementia care is the effect of nursing staff's person-centred attitudes on their job-related well-being (Brodsky *et al.* 2003, Zimmerman *et al.* 2005, Moyle *et al.* 2011), besides its effect on residents' well-being.

Why is this research or review needed?

- Person-centred care has benefits for people with dementia. First findings on how nursing staff's person-centred attitudes, crucial to person-centred care, relate to their job-related well-being are mixed.
- Possibly, there are particular job characteristics that nursing staff with a strong person-centred attitude in particular need and benefit from.
- This insight can help healthcare organizations decide how to create a work environment that supports the provision of high-quality, person-centred care.

What are the key findings?

- Job characteristics have a stronger association with job-related outcomes than the extent to which the attitude of healthcare staff is person-centred.
- Supervisor support seems more important and coworker support less important for nursing staff with a strong person-centred attitude.
- Person-centred nursing staff members feel more satisfied and competent to perform their job, but are more likely to become emotionally exhausted.

How should the findings be used to influence policy/practice/research/education?

- To create a satisfied and sustainable workforce, dementia care organizations should primarily focus on creating a positive, healthy work environment (balancing job demands and providing decision-authority and social support).
- If case organizations want to give person-centred care, they should provide a work environment where healthcare staff members feel supported by the organization and their supervisor in particular.

Job-related well-being has been identified as a key area of concern for attracting and retaining staff caring for people with dementia (Drebing *et al.* 2002, Vernooij-Dassen *et al.* 2009). It is therefore important to study how person-centred attitude influences their job-related well-being and if there are particular job characteristics that staff with a strong person-centred attitude require and benefit from.

It is well-known from occupational stress research that job characteristics such as job demands, decision-authority or workplace support, are important predictors of job-related well-being, such as job satisfaction (e.g. van der Doef & Maes 1999b, Bakker & Demerouti 2007, Häusser

et al. 2010). However, this research also showed that personal characteristics can moderate the impact that particular job characteristics have on job-related well-being (de Jonge & Kompier 1997, Warr 2007). In other words, what people need to be satisfied in their job may differ pending on personal characteristics. Person-centredness might be such a personal characteristic for healthcare staff in dementia care.

This explorative study intends to zoom in on the direct effect of person-centredness on job-related well-being and its moderating effect on the relationship between job characteristics and job-related well-being. This insight can help healthcare organizations decide what to focus on in the work environment to create and maintain a strong workforce providing high-quality, person-centred care.

Background

The Demand-Control-Support Model

The Demand-Control-Support (DCS) Model (Johnson & Hall 1988, Karasek & Theorell 1990) provides a theoretical framework to study the interplay between staff's personal characteristics (e.g. person-centredness) and job characteristics in relation to their job-related well-being. The model's job characteristics are job demands (i.e. work and time pressure), decision-authority (i.e. job control) and workplace social support from supervisors and coworkers.

The DCS Model assumes that the most adverse outcomes are expected in jobs with high levels of demands and low levels of control and/or social support (Johnson & Hall 1988). This assumption has indeed been confirmed in a wide range of occupations (e.g. van der Doef & Maes 1999b, Häusser *et al.* 2010), including healthcare staff in homes for people with dementia (Willemse *et al.* 2012).

The Model is widely used as a base to study both job and personal characteristics in relation to employee well-being (van der Doef & Maes 1999b, Häusser *et al.* 2010). Personal characteristics have been included because research showed that the relationship between job characteristics and employee well-being can be better predicted when personal characteristics were taken into account (de Jonge & Kompier 1997, Warr 2007). What people especially need to be satisfied in their job may differ pending on, or be moderated by, personal factors such as attitudes, needs and preferences. Examples of personal characteristics in DCS research are active coping, locus of control, affect and self-esteem (e.g. de Rijk *et al.* 1998, Shimazu *et al.* 2005). The hypothesized moderating effects were often found. The direction and nature of these effects have been found to differ between the

types of personal characteristics studied. Research also found direct effects of personal factors on employee well-being. These direct effects should not be ignored and give a meaningful piece of information as well (Jaccard *et al.* 1990).

Person-centredness and job-related well-being

The personal characteristic, specific to dementia care, this study focuses on is staff's person-centredness towards people with dementia. First research showed that a more person-centred, or positive attitude of nursing staff towards people with dementia is related to more job satisfaction (Aström *et al.* 1991, Brodaty *et al.* 2003, Zimmerman *et al.* 2005, Moyle *et al.* 2011). Results about burnout and perceived strain were mixed. While Aström *et al.* (1991) found that more positive attitudes were related to lower burnout scores, Brodaty *et al.* (2003) found that it was related to more perceived strain.

Some of the research in this field has also noticed the substantial impact of job characteristics such as job demands and supervisor support on job-related well-being. Brodaty *et al.* (2003) described that there were significant differences between the participating facilities and their total strain scores that could not be explained by staff's attitudes. The authors suggested that differences in strain scores may result from characteristics of the work environment, such as differences between homes in culture and different leadership styles, besides staff's attitudes. Lintern *et al.* (2000) also suggested an interplay between person-centredness and characteristics of the work environment in relation to positive outcomes in dementia care. They suggested that improvements in staff attitudes may have little impact on residents' well-being where there are organizational obstacles that prevent implementation of positive change. Consequently, they stated that care organizations need to consider and support employee well-being to enable them to provide person-centred care.

Person-centredness in the DCS Model

Person-centredness has, to our knowledge, not been studied in relation to any occupational stress model before. As has been found for other personal characteristics, one could expect to find both direct and moderating effects of person-centredness in relation to job characteristics and job-related well-being. A direct effect of person-centredness (Figure 1: arrow 1) has been studied and found in the research described earlier (Aström *et al.* 1991, Brodaty *et al.* 2003, Zimmerman *et al.* 2005, Moyle *et al.* 2011). However, this research did not study person-centredness in relation to job characteristics. Person-centredness might also moderate the impact of job characteristics on nursing staff's job-

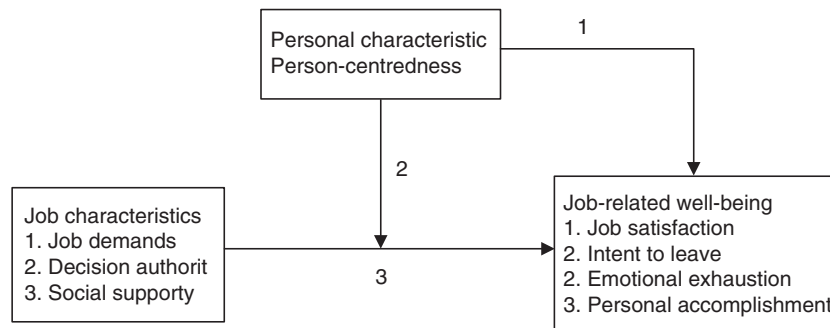


Figure 1 Schematic presentation of model of this study: job characteristics, person-centredness and job-related well-being.

related well-being (Figure 1: arrow 2). It might, for example, moderate the impact decision-authority has on nursing staff's job satisfaction in dementia care. More person-centred staff might have higher expectations about their work and the care they provide to residents with dementia as they are aware of the importance of supporting both physical and psychological needs. As a consequence, they could have a stronger need for decision-authority to come up to one's expectations and to be satisfied with their job. In other words, person-centredness could both strengthen the positive impact of the presence of decision-authority and the negative impact when there is a lack of it. In the same line, one could assume that high job demands might have a more deleterious effect for staff with a more person-centred attitude. Thus, the possible moderating effect of person-centredness implies that the impact of job characteristics could depend on staff person-centredness.

The study

Aim

The aim of this paper is to explore what the role is of nursing staff's person-centredness towards people with dementia in relation to the characteristics of their work environment and job-related well-being. The job characteristics of the DCS Model, job demands, decision-authority, coworker- and supervisor support, are studied. Both the direct effect of person-centredness on job-related well-being (Figure 1: arrow 1) and the moderating effect of person-centredness on the relation between job characteristics and job-related well-being (arrow 2) are studied. The direct effects of the job characteristics (arrow 3) are not the main focus of this study. These effects are included since a model is being tested in this paper. The effects of these job characteristics on job-related well-being in this sample have been thoroughly described elsewhere (Willemse *et al.* 2012).

Design

Cross-sectional survey data were used from the Living Arrangements for people with Dementia (LAD) study. The LAD-study is a national ongoing monitoring study in nursing-home care for people with dementia in the Netherlands (Willemse *et al.* 2011).

Sample

In the Netherlands, nursing-home care for people with dementia is provided on dementia-specific wards in a wide range of different types of long-term care facilities. In this study, a representative sample of 136 facilities ranging from traditional large-scale nursing homes to stand-alone group living homes in the community was included.

At each participating facility, random selection of nursing staff was undertaken by a research assistant (RA). The RA asked a manager for a list of all nursing staff names and randomly selected 15 staff members with a selection procedure using the first letter of their family names. This was done in absence of the manager to maintain anonymity. After the selection was conducted, the list was returned to the manager. In facilities with 15 nursing staff or less, all were selected.

All nursing staff (i.e. (certified) nursing assistants and registered nurses) working in the living arrangement were eligible to participate except for temporary workers and staff with a flexible contract working at different locations of the care organization. A total of 1952 questionnaires were distributed to staff of which 1147 of them returned the questionnaire and met our criteria, resulting in a response rate of 59%. For the aim of this paper, we excluded the small number of participants that were working less than 1 year in the profession (1.1%), worked less than 8 hours a week (1.3%), or had missing values on any of the key study variables. The final sample for this study is 1093 nursing staff.

Data collection

Self-report questionnaires were sent to the home address of selected nursing staff and could be anonymously returned to the researchers in a pre-stamped envelope. Staff members were invited to participate voluntarily and were informed about the process and aim of the study. Consent to participate was received by voluntary return of the questionnaire. Written informed consent was not obtained. The study was conducted between November 2008 and May 2009.

Validity and Reliability

Person-centred attitude was measured using the subscale ‘recognition of personhood’ of the Approach to Dementia Questionnaire (ADQ) (Lintern *et al.* 2000, Lintern 2009). This subscale measures staff’s recognition of people with dementia as sentient beings. It refers to the way people with dementia should be recognized and responded to as unique individuals and with the same value as any other person’ (Lintern 2009: pp. 70–71). As Dutch translation of the English ADQ was not available, the questionnaire was translated conform translation standards by a translation agency. To see if the translation influenced the internal structure of the instrument, a principal axis factoring analysis was performed. All the original items of the recognition of personhood subscale were loading on the same factor. However, four of the eleven items (i.e. 5, 7, 14 and 15) were not loading strong enough (cut-off point <0.4) (Stevens 2002). Cronbach’s alpha in our sample was 0.68 for the original person-centredness subscale and 0.75 for the adapted – 7 items – Dutch recognition of personhood subscale. The remaining 7 items of the Dutch version of the ‘recognition of personhood’ subscale are still covering the concept it purports to measure.

All items were measured using a five point scale ranging from (1) ‘strongly agree’–(5) ‘strongly disagree’. The mean sum score was calculated which ranged from 1–5, with higher scores indicating a more person-centred attitude.

Measures for job characteristics – job demands, decision-authority, supervisor- and coworker support – were derived from the Leiden Quality of Work Questionnaire (LQWQ) (van der Doef & Maes 1999a). The LQWQ has a four-point rating scale ranging from (1) ‘strongly disagree’–(4) ‘strongly agree’. Job demands were measured with the 5-item work and time pressure scale of the LQWQ (Cronbach’s $\alpha = 0.76$). The items addressed the degree to which the pressure of work and time urgency dominate the work environment, e.g. ‘I have enough time to provide good care to residents’. The 4-item decision-authority scale ($\alpha = 0.71$) measured the extent

to which care staff are able to make their own decisions, e.g. ‘My job allows me to make a lot of decisions on my own’. Social support was measured as supervisor and coworker support. The 4-item supervisor support scale ($\alpha = 0.92$) measured to which extent management is supportive, e.g. ‘I feel appreciated by my supervisor’. The 4-item coworker support scale ($\alpha = 0.85$) assessed the extent to which care staff is supportive of one another, e.g. ‘People I work with are helpful in getting the job done’. For all measures the mean sum score was calculated which ranged from 1–4 with higher scores indicating more job demands, decision-authority, supervisor- or coworker support.

Several outcome measures were used to measure job-related well-being: job satisfaction, intent to leave, emotional exhaustion and personal accomplishment (cf. Warr 2007). Job satisfaction was assessed by a 3-item scale derived from the LQWQ ($\alpha = 0.86$) (van der Doef & Maes 1999a), e.g. ‘I am satisfied with my job’. Intent to leave was assessed by a 3 item scale that was also derived from the LQWQ ($\alpha = 0.84$) (van der Doef & Maes 1999a). This scale focused on thinking about leaving and thinking about searching for a job, e.g. ‘I would like to change jobs’. The mean sum score ranged from 1–4 with higher scores indicating more job satisfaction and more intent to leave. Emotional exhaustion was measured by the well-validated Dutch version (Schaufeli & Dierendonck 2000) of the Maslach Burnout Inventory (MBI) (Maslach & Jackson 1986). The scale contained 8 items with a 7-point response scale ranging from (0) ‘never’–(6) ‘always, daily’ ($\alpha = 0.88$) and measured the strain nursing staff experienced e.g. ‘I feel emotionally drained from my work’. Personal accomplishment was assessed using the 7-item subscale of the Dutch version of the MBI ($\alpha = 0.76$) (Maslach & Jackson 1986, Schaufeli & Dierendonck 2000). An example item is: ‘I have accomplished many worthwhile things in this job’. The mean sum score ranged from 0–6 with higher scores indicating more emotional exhaustion and more personal accomplishment.

Demographic characteristics including age, gender and level of nursing education and *employment status*, employment in profession, length of service and contract hours per week were assessed since they are considered to be potential confounders (cf. de Jonge *et al.* 2008).

Ethical considerations

The Medical Research Involving Human Subjects Act (WMO) does not apply to this study and no formal ethical scrutiny was required and undertaken (Willemse *et al.* 2011, 2012). This has been formally confirmed by the Medical Ethics committee of UMC Utrecht for the third wave of data col-

Table 1 Means, standard deviations and Pearson correlations for the study variables ($n = 1093$).

Measure	Range	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age	17–66	43.22	9.90											
2. Level of nursing education [†]	0–5	–	–	–0.06*										
3. Hours per week [†]	1–4	–	–	–0.08**	0.05									
4. Job demands	1–4	2.45	0.49	0.03	–0.01	0.09**								
5. Decision-authority	1–4	2.97	0.41	–0.06	0.08**	0.01	–0.46**							
6. Coworker support	1–4	3.16	0.45	–0.10**	0.03	0.01	–0.16**	0.32**						
7. Supervisor support	1–4	3.01	0.58	–0.03	0.00	0.07*	–0.32**	0.43**	0.33**					
8. Person-centredness	1–5	4.39	0.16	0.01	0.03	0.08**	–0.02	0.17**	0.21**	0.15**				
9. Job satisfaction	1–4	3.07	0.60	0.01	–0.05	0.01	–0.47**	0.43**	0.42**	0.44**	0.17**			
10. Intent to leave	1–4	2.00	0.66	–0.08**	0.10**	0.02	0.29**	–0.27**	–0.28**	–0.35**	–0.10**	–0.58**		
11. Emotional exhaustion	0–6	1.59	0.99	0.02	0.01	0.20**	0.57**	–0.36**	–0.23**	–0.30**	0.01	–0.48**	0.37**	
12. Personal accomplishment	0–6	4.65	0.76	–0.01	0.01	0.12**	–0.14**	0.24**	0.19**	0.18**	0.32**	0.27**	–0.19**	–0.15**

* $P < 0.05$; ** $P < 0.01$.[†]Educational level and hours per week are ordinal data higher scores respectively indicating a higher educational level and more working hours per week.

lection of the LAD-study. This third wave included the same instruments as in the first wave, plus some extra instruments.

Data analysis

The possible direct effect of person-centredness on job-related well-being and the moderating effect of person-centredness on the relationship between job characteristics and job-related well-being, were tested using multilevel hierarchical regression analyses in MLwiN (Version 2.15). Two-level multilevel regression analyses were performed because of the hierarchical nature of the data (healthcare workers nested within living arrangements). Including a random intercept was found to significantly improve the fit of the model with the data.

Demographic variables (see Table 3) that significantly correlated with the moderator, or one or more of the job characteristics and at least one of the measures for job-related well-being were entered in the first step of the regression model as confounders. The confounders are age, educational level and contract hours per week (Table 1). In step 2, the job characteristics were entered. In step 3, person-centred attitude was entered. Finally, in step 4, the four two-way interaction terms (i.e. demands \times person-centred attitude (pca); decision-authority \times pca; coworker support \times pca; supervisor support \times pca) were entered.

Interaction terms were computed from centred values for job characteristics and person-centred attitude to reduce problems of multicollinearity (Jaccard *et al.* 1990). Accordingly, unstandardized regression coefficients were presented in Table 2 (cf. Jaccard *et al.* 1990, Aiken & West 1991).

A likelihood-ratio test (with Chi-square distribution) was used to assess whether the direct effect of person-centred attitude (step 3) and the interaction terms (step 4) generated a significant improvement on the model's fit. In case the model with step 4 fitted the data best, significant 2-way interaction effects were graphically presented (Aiken & West 1991). The relationship between the job characteristic and the outcomes at low and high levels of the moderator were plotted in simple regression lines. Values of the job characteristic and moderator were chosen two standard deviations below and above the centred mean.

Results

Participants

Mean age of nursing staff was 43.2 years (SD 9.9) (Table 3). Three-quarters of them were of nursing educational level 3, which is equal to certified nursing assistant (CNA) in the USA.

Table 2 Hierarchical multiple multilevel regression analysis of person-centred attitude, job demands, job control and social support on job satisfaction, intent to leave, emotional exhaustion and personal accomplishment.

	Job satisfaction			Intent to leave			Emotional exhaustion			Personal accomplishment		
	$\Delta\chi^2$	ΔR^2	β	$\Delta\chi^2$	ΔR^2	β	$\Delta\chi^2$	ΔR^2	β	$\Delta\chi^2$	ΔR^2	β
Step 1	7.86*	0.67		12.46**	1.26		25.72***	2.62		18.30***	2.02	
Age			0.00			-0.01***			-0.00			0.00
Level of nursing education			-0.04*			0.07**			0.01			-0.01
Hours per week			0.03			0.00			0.16***			0.08***
Step 2	367.41***	31.88		160.57***	15.31		341.50***	30.06		68.96***	6.94	
Demands			-0.34***			0.28***			0.98***			-0.06
Decision-authority			0.14**			-0.08			-0.21**			0.26***
Coworker support			0.33***			-0.25***			-0.24***			0.13*
Supervisor support			0.20***			-0.19***			-0.14**			0.08
Step 3	3.27†	0.49		0	0		4.17*	0.50		52.85***	5.24	
PCA			0.07*			-0.01			0.13*			0.40***
Step 4	12.27*	1.49		11.39*	1.20		9.23†	1.01		2.17	0.43	
Demands × PCA			0.09			-0.05			0.28			-0.05
Decision-authority × PCA			0.01			-0.00			0.08			-0.12
Coworker support × PCA			-0.22*			0.25*			0.43*			-0.15
Supervisor support × PCA			0.25**			-0.31**			-0.19			-0.00
Total best model	390.81	34.53		184.42	17.77		380.62	34.19		140.11	14.20	

* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$.† $P < 0.10$.

Table 3 Nursing staff characteristics ($n = 1093$).

	%
Female	94.7
Age (17–66 years) – mean (SD)	43.2 (9.9)
Level of nursing education (%)*	
No nursing education	2.6
Level 1	0.7
Level 2	11.3
Level 3	74.5
Level 4	4.2
Level 5	6.8
Contract hours per week	
8–16 hours	12.4
16–24 hours	33.0
24–32 hours	30.3
>32 hours	24.3
Employment in profession	
1–10 years	33.8
10–20 years	33.1
>20 years	33.1
Length of service	
<2 years	30.3
2–5 years	35.4
>5 years	34.3

*Dutch level of nursing education: level 2 is equivalent to nursing assistant (NA), level 3 to certified nursing assistant (CNA) and level 4 to Registered Nurse (RN).

Model fit and explained variance

For three of the four measures of job-related well-being, the full model (step 4) fitted the data best (Table 2). However, for emotional exhaustion only a trend ($P < 0.10$) was found for the fit of step 4. In case of personal accomplishment, the model with direct effects of both job characteristics and person-centredness (step 3) fitted data best. The full models, including direct effects of job characteristics and person-centredness and moderating effects, explained most of the variance for job satisfaction ($R^2 = 35\%$) and emotional exhaustion ($R^2 = 34\%$) and, to a lesser extent, for intent to leave ($R^2 = 18\%$). For personal accomplishment, also a somewhat smaller amount of variance was explained by the best fitting model (step 3; $R^2 = 14\%$).

Moderating effect of person-centredness (Figure 1; Arrow 2)

Moderating effects are discussed first because, in the presence of a moderating effect, direct effects can only be interpreted in light of the moderating effect found. In general, five significant moderating effects of person-centr-

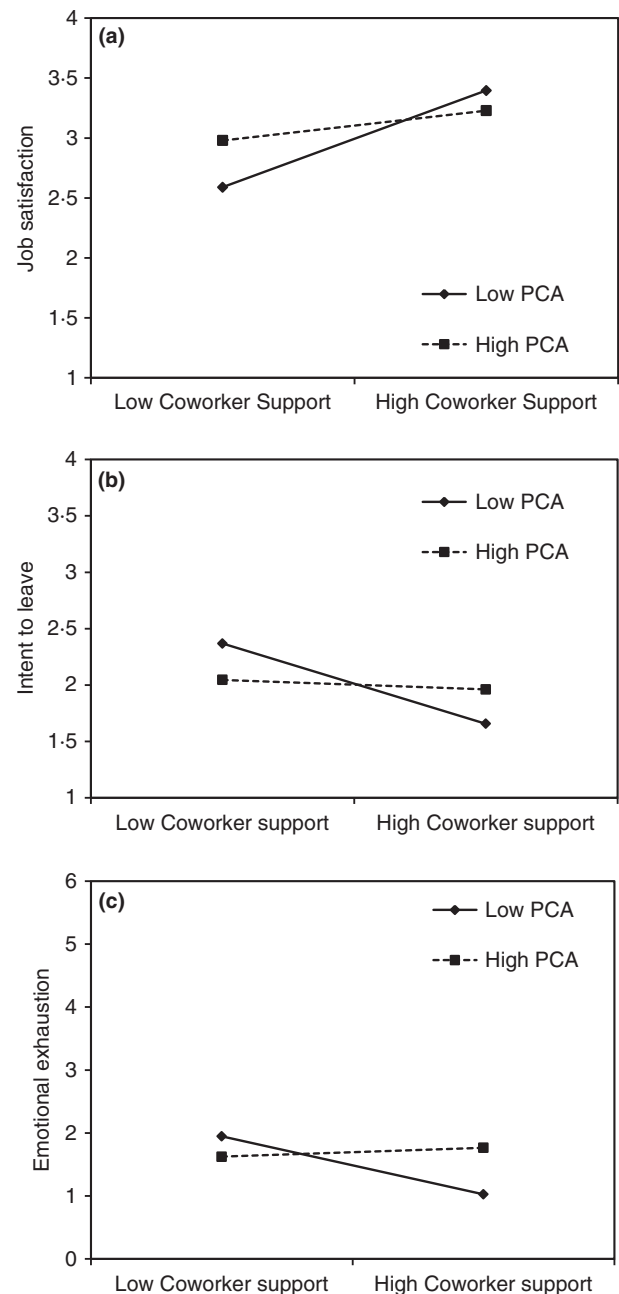


Figure 2 Two-way interaction of coworker support and person-centred attitude in relation to: (a) job satisfaction, (b) intent to leave and (c) emotional exhaustion.

edness were found, all in relation to workplace social support (Table 2). Three moderating effects were found for person-centredness on the relationship between coworker support and successively job satisfaction, intent to leave and emotional exhaustion.

These moderating effects are shown in Figure 2a–c. Figure 2 shows that the relationship between coworker support and successively job satisfaction (2a), intent to leave

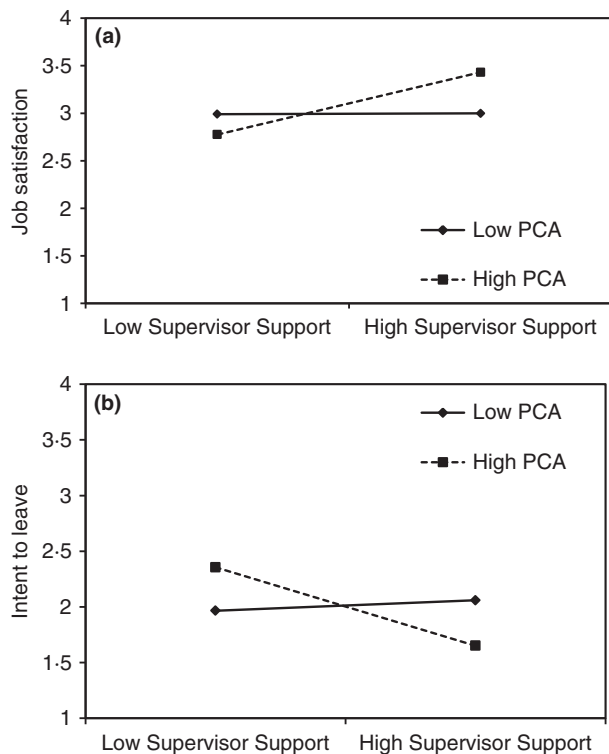


Figure 3 Two-way interaction of supervisor support and person-centred attitude in relation to: (a) job satisfaction and (b) intent to leave.

(2b) and emotional exhaustion (2c) was stronger for nursing staff that had a less person-centred attitude than for those with a strong person-centred attitude.

Furthermore, two moderating effects were found for person-centredness on the relation between supervisor support and successively job satisfaction and intent to leave, as depicted in Figure 3. Both the relationship between supervisor support and job satisfaction (3a) and the relationship between supervisor support and intent to leave (3b) were stronger for nursing staff that had a strong person-centred attitude than for those with a less person-centred attitude. No moderating role of person-centredness on the relationship between job demands or decision-authority and job-related well-being was found.

Direct effect of person-centredness (Figure 1; Arrow 1)

Nursing staff with a stronger person-centred attitude were found to be more satisfied with their job and feel more personally accomplished, but also more emotionally exhausted. Person-centredness explained a relative large part of variance in relation to personal accomplishment ($\Delta R^2 = 5\%$), compared with job satisfaction and emotional exhaustion (both $\Delta R^2 = 0.5\%$).

Direct effects of job characteristics (Figure 1; Arrow 3)

Regarding the job characteristics, several direct relationships with employee well-being were found, too. First, higher job demands were related to less job satisfaction, more intent to leave and more emotional exhaustion. Second, higher decision-authority was associated with more job satisfaction, less emotional exhaustion and more personal accomplishment. Third, more coworker support was related to more job satisfaction, less intent to leave, less emotional exhaustion and more personal accomplishment. Finally, more supervisor support was associated with more job satisfaction, less intent to leave and less emotional exhaustion.

Discussion

The present study explored what the role is of nursing staff's person-centredness towards people with dementia in relation to job characteristics and job-related well-being. Both direct and moderating effects of person-centredness were studied in relation to employee well-being.

Findings showed that nursing staff's person-centredness does play a role in relation to job characteristics and job-related well-being, although it is a modest one. Moderating effects of person-centredness were only found with respect to social support. The moderating effects found showed that supervisor support seems more important and coworker support less important in relation to staff's job-related well-being for nursing staff with a strong person-centred attitude compared with those who are less person-centred. With regard to the direct effect of person-centredness on job-related well-being, results showed that person-centred staff members feel more satisfied and competent to perform their job, but are also more likely to become emotionally exhausted.

However, both the direct and moderating effects found did not explain much of the variance of job-related well-being. As has been found in other studies focusing on both personal and job characteristics (de Rijk *et al.* 1998, Shimazu *et al.* 2005), the relationship between job characteristics and job-related well-being was much stronger. Apparently, most nursing staff will be more satisfied when they experience less job demands, more decision-authority and more coworker- and supervisor support, regardless of their person-centredness.

The small contribution found for person-centredness could also be caused by a ceiling effect and the limited variability of the Approach to Dementia Questionnaire (ADQ) (Lintern 2009). This has also been found in other studies

(Lintern 2009). It has been suggested that staff know that they are supposed to think about residents as individuals and treat them in an individualized way and can therefore give socially or politically correct answers. Another explanation might be that the ADQ is outdated in the sense that the general population of caregivers for people with dementia have developed to be more person-centred over the last decades. Items are needed that are more sensitive to measure the current differences in person-centredness.

Given the explorative nature of this study, the limitations of the questionnaire used, and the fact that the moderating effects found are rather consistent throughout the outcome measures used, it seems worthwhile to interpret the different moderating effects found of person-centredness. The effects found indicate that there are differences between care workers in what they need and provides satisfaction and fulfilment in their job. Possibly, highly person-centred staff are satisfied with their work most when they can relate to residents and can provide individually adapted care, which supportive supervisors enable them to do so. This suggestion is in line with Aström *et al.* (1991), who found that staff with a more positive attitude towards people with dementia experienced a close contact with residents as the most stimulating factor at work. Our study adds to this, that their feeling of solidarity and satisfaction can, however, be jeopardized if they do not feel supported, or do not perceive the necessary preconditions from their supervisor. The importance of organizational or supervisor support has been acknowledged before to be of great importance for the provision of person-centred care (Kitwood 1997, Lintern *et al.* 2000, Edvardsson *et al.* 2010).

On the other hand, our study shows that coworker support overall has a positive association with nursing staff's well-being, but especially for those who are less person-centred. Both this finding and the findings of Aström *et al.* (1991) suggest that colleagues in particular are an important additional or alternative source of satisfaction for nursing staff that are less person-centred. Aström *et al.* (1991) suggested that contact with residents with dementia in itself is less stimulating for them. This finding sheds light on a current discussion about working alone in small-scale group living homes. Here, residents live together in small groups and nursing staff are often working alone. Staff members, directors from the field and researchers argue about the effect of working alone. Some people think this might be a negative aspect of small-scale care, while others do not perceive this as problematic. That our research shows that the association between coworker support and staff's well-being differs depending on their person-centredness suggests that working alone might indeed be a prob-

lem for some, but not for others. In terms of the person-environment fit (P-E fit) principle (Edwards & Cooper 1990, Edwards 1991) one might say that working alone in group living homes might potentially create a P-E misfit for less person-centred staff and can make them feel dissatisfied and emotionally exhausted. They might better fit in a work environment where they have fellow staff members around.

Our study showed that person-centredness both has a positive and negative relationship with job-related well-being. Person-centredness was found to be related to more job satisfaction and personal accomplishment (positive relationship), but also to more emotional exhaustion (negative relationship). These findings resemble the suggestion that the very same factors nursing staff strive for, such as becoming involved with clients, can at the same time be risk factors for their well-being (Alfredson & Annerstedt 1994). Furthermore, results are in line with findings of Brodaty *et al.* (2003), who found that staff with more positive attitudes towards people with dementia reported higher levels of strain and job satisfaction at the same time. They might experience more strain, but also feel more satisfied with their jobs, because they are more involved in their work.

The relatively strong relationship found between person-centredness and personal accomplishment is in accordance with findings from studies focusing on competence and self-efficacy (Kahana *et al.* 1996, Schepers *et al.* 2012). Person-centred staff probably feels empowered to do their job because they better understand residents with dementias' needs and behaviours and are better able to relate to them. Or, as has been suggested earlier, the optimism of those who are generally more positive in their outlook, would apply equally to their own sense of self-efficacy, and to that of residents they care for (Lintern 2009).

Furthermore, this relationship sheds light on why person-centredness accentuates the importance of supervisor support for nursing staff's well-being. Possibly, well-being of highly person-centred and thus self-efficient staff is jeopardized when they do not feel enabled and maybe even barricaded by their supervisor. This experience might challenge their efficacy beliefs and discourage them, resulting in less satisfaction and more intent to leave. It is known that highly self-efficient people become discouraged when their efficacy beliefs are challenged by the uncontrollability of a situation (Schaubroeck & Merritt 1997). Further quantitative and qualitative research is needed to study the indications found in this explorative study of the impact of person-centredness in relation to job characteristics and job-related well-being.

Limitations of the study

The possible ceiling effect and limited variability of the ADQ is a first limitation of our study. Second, there are limitations to the cross-sectional design used, which preclude causal conclusions. Third, data were collected with a self-report method, which could have inflated the relationships investigated in this study through common method effects. However, it has recently been disputed that these relationships are simultaneously attenuated due to common unreliability (Conway & Lance 2010). Finally, the robustness of findings regarding the moderating effects is questionable since these effects accounted for relatively little variance (R^2 ranging from 1.0–1.5%). However, as direct effects and interactive terms are necessarily and usually highly intercorrelated, an exact partition of variance into direct and interactive effects is hardly possible. On the other hand, findings show that the explained variance of the direct effect of person-centredness is relatively small as well in most cases. To determine the impact of the interaction effects found, a qualitative study is needed to determine their importance and to fully understand its practical implications (Aguinis & Gottfredson 2010).

Conclusion

To create a satisfied and sustainable workforce, long-term care organizations should primarily focus on creating a positive work environment which means balancing job demands and providing decision-authority and social support. If organizations want to successfully implement person-centred care and expect a person-centred attitude, they should create a work environment where staff members feel supported by their supervisor in particular. Furthermore, since a possible con of person-centredness is impending emotional exhaustion, the organization should create a support system that helps staff balance their engagement with residents and their professional distance.

Secondly, training and coaching of nursing staff to further develop a person-centred attitude, could create a more confident and stronger workforce. However, it is not clear up to which point the person-centredness of staff can be improved or if a person-centred attitude is mostly a stable trait. Indications have been found that the attitude of staff towards people with dementia can be improved (Lintern 2009). However, one of the limitations of this study was the level of staff turnover, making it difficult to assess whether changes over time were due to the development of existing staff or a different group of staff. A direction for future research therefore is to thoroughly study if training

in dementia care can improve staff's person-centredness. This insight into enhancing person-centredness is important since person-centred care has been found to have a positive impact on the quality of life of people with dementia (Sloane *et al.* 2004) and provides important implications for recruitment and training in person-centred dementia care.

Finally, a more person-centred attitude and more confidence could have a positive impact on staff's creativity and productivity and thereby the quality of care. Moreover, this might improve the attractiveness and the reputation of the profession which is important in light of the decreasing labour force.

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Conflict of interest

No conflict of interest has been declared by the authors.

Author contributions

BW, DS and AMP were responsible for the study conception and design and data collection. AMP has supervised the study. BW and QV performed the data analysis. BW was responsible for the first draft of the manuscript. AMP, JdJ, MD and DS made critical revisions to the draft and final paper for important intellectual content.

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (http://www.icmje.org/ethical_1author.html)]:

- substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;
- drafting the article or revising it critically for important intellectual content.

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